

Senator Birkholz, Rep Palsrok , members of the Committees. I am Donna Stine, Deputy Director for Policy at Michigan United Conservation Clubs. Thank you for the opportunity to testify on the Impacts of Beach Maintenance and Removal of Vegetation.

Let me begin by quoting from the Prescription for the Great lakes Ecosystem Protection and Restoration (Avoiding the Tipping Point of Irreversible Changes) December 2005.

“There is widespread agreement that the Great Lakes presently are exhibiting symptoms of extreme stress from a combination of sources that include toxic contaminants, invasive species, nutrient loading, shoreline and upland land use changes, and hydrologic modifications. Many of these sources of stress and other have been impacting the lakes for over a century. These adverse impacts have appeared gradually over time, often in nearshore areas, in the shallower portion of the system and in specific fish populations. Factors such as the size of the lakes, the time delays between the introduction of stress and subsequent impacts, the temporary recovery of some portions of the ecosystem and failure to understand the ecosystem-level disruptions caused by the combination of multiple stresses have led to the false assumption that the Great Lakes ecosystem is healthy and resilient.

Because it has taken the Great Lakes four centuries of exposure to these human-induced stresses to get to this point, some argue, we have decades to control these and other sources of stress and promote the lakes’ recovery. From this perspective, protecting the Great Lakes is not particularly urgent and action can wait until we conduct more studies, while taking small corrective measures when the opportunity and need arises. However, if not addressed with great urgency the Great Lake system may experience further –and potentially irreversible damage.

In large areas of the lakes, historical sources of stress have combined with new ones to reach a tipping point, the point at which ecosystem level changes occur rapidly and unexpectedly, confounding the traditional relationship between sources of stress and the expected ecosystem response. There is compelling evidence that in many parts of the Great Lakes we are at or beyond this tipping point.

The major cause of ecosystem breakdown is the severe damage that has been done to the Great Lakes’ self-regulating mechanisms. In the past healthy nearshore communities and tributaries helped reduce the impact of many stresses on or entering the lakes.”

Some will say that this dire message has nothing to do with the issue of beach maintenance and vegetation removal. From Michigan United Conservation Clubs’ perspective that is clearly the reason why we are here today. We, as the property owners of these wetlands, are being asked whether we will allow a few to create additional stressors on our aquatic resources and further damage our natural resources...to ignore the breakdown of the Great Lakes’ ecosystem. For MUCC, the answer is no.

This is not a small issue or a small problem. The research funded by DEQ clearly shows that vegetation removal and beach maintenance had an impact on the number and diversity of fish and invertebrate species, not just at the site of removal but spreads out into adjacent areas. The

most dramatic impact appears to be related to larval fish. Yellow perch, smallmouth bass, and large mouth bass appeared to be the most impacted by the vegetation removal activities.

In general Great Lakes Fish stocks are plummeting. We are or have experience extirpation or major declines in important native fish species such as lake trout and deepwater ciscoes . Widespread reproductive failures of native fish species such as lake trout sturgeon, lake herring , coaster brook trout and introduced species such as pacific and Atlantic salmon is also occurring. Kelly Smith, Chief of the Michigan Department of Natural Resources Fisheries Division has stated that Lake Huron might have already experience the tipping point and that it is too late to bring back the bountiful harvest of salmon and trout that we experienced just a few years ago. Fish stocking have been decreased not only in Lake Huron but also Lake Michigan due to the demise of the base of the food web.

Together the eight Great Lakes states hold one-third of the nation's total registered boats. Most of the boats are the size most often used for fishing. There are also more than 1.8 million licensed anglers. Commercial and sport fishing contribute a combined \$4 billion to the Great Lakes' economy.

There are only a few areas along the Great Lakes which have these critical coastal wetlands and their numbers have been diminished in quantity and quality. Over half of the region's original wetlands have been lost. As their number decline, each remaining acre becomes more vital to the vitality of the Great Lakes and as self-regulating mechanisms to maintain the Lakes ecosystem.

This Legislature endorsed the Great Lakes Collaborative, an effort initiated by President Bush to restore the Great Lakes. A critical component of the restoration plan is to preserve what is functioning and restore as much as possible. Clearly the research has shown that vegetation removal and beach maintenance altered the chemical and physical conditions of near shore waters and have a negative impact on fish and invertebrate populations. We cannot hope to restore the Great Lakes and our Great Lakes fishery without ensuring that we protecting functioning ecosystems wherever possible. We urge this Legislature to learn from the research, recognize the serious problems facing the Great Lakes, and ensure the protection of the critically important Great Lakes wetland areas.

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